IAP7 Rec'd PCT/PTO 20 JUL 2006

EXPRESS MAIL: EV 913276600US

24498 CUSTOMER NO:

PTO-1390 (Rev. 07-2005) Approved for use through 3/31/2007. OMB 0651-0021 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

ATTORNEY'S DOCKET NUMBER

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## TRANSMITTAL LETTER TO THE UNITED STATES PU040042 DESIGNATED/ELECTED OFFICE (DO/EO/US) **CONCERNING A SUBMISSION UNDER 35 U.S.C. 371** INTERNATIONAL FILING DATE INTERNATIONAL APPLICATION NO. February 18,2004 February 18, 2004 CT/US2004/004928 TITLE OF INVENTION thou Apparatus For Optimizing Bandwidth In Broadcast/Multicast\_Video systems APPLICANT(S) FOR DO/EO/US Ohn Alan Gervais, Mike Arthur Derrenberger Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following Items and other information: This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items X (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). A copy of the International Application as filed (35 U.S.C. 371(c)(2)) X is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) X are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). An English language translation of the annexes of the International Preliminary Examination Report under PCT 10. Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: An Information Disclosure Statement under 37 CFR 1.97 and 1.98; Search Report and References 11. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 12. <sub>z</sub> A preliminary amendment. An Application Data Sheet under 37 CFR 1.76. A substitute specification. A power of attorney and/or change of address letter. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825: A second copy of the published International Application under 35 U.S.C. 154(d)(4). A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Page 1 of 3 Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

## IAP11 Rec'd PCT/PTO 20 JUL 2006

EXPRESS MAIL: EV 913276600 US

Customer No: 24498

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of Information unless it displays a valid OMB control number.

| U.S. APPLICATIO                                                                       | N NO. (if known,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | see 27 CFR 1.5)                                                    | INTERNATIONAL APP                                                                                                          |                                        | ATTORNET S DOOR                        |              |
|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------|--------------|
| • • • • • • • • • • • • • • • • • • • •                                               | 58669                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0                                                                  | PCT/US2004/004                                                                                                             | 1928                                   | PU04004                                |              |
|                                                                                       | ems or information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                    | Return Postca                                                                                                              | ird                                    |                                        |              |
|                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                    | Certificate o                                                                                                              |                                        | Mailing                                | ٠.           |
|                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <u>X</u>                                                           | Copy of Int'l                                                                                                              |                                        |                                        | IPRP         |
| -                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | -                                                                  | Copy of The 1                                                                                                              | rier.bac                               | نني كالمكاف ويورون والمساعد والمساجرون |              |
|                                                                                       | ving fees have be                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                    | •                                                                                                                          |                                        | CALCULATIONS<br>\$                     | PTO USE ONLY |
| 21. Basic                                                                             | national fee (37 (                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | FR 1.492(a))                                                       |                                                                                                                            |                                        | 300.00                                 |              |
| 22. XX Examin                                                                         | nation fee (37 CF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | R 1.492(c))                                                        |                                                                                                                            |                                        |                                        |              |
| f the written opinion<br>by IPEA/U<br>All other situations                            | S indicates all da                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | \$ 200.00                                                          |                                                                                                                            |                                        |                                        |              |
| 23. Search fee (37 CF) International Search previously                                | th fee (37 CFR 1.45) of the ISA/US of the IS | or the Internationals satisfy provision is been paid on the hority | al preliminary examination repass of PCT Article 33(1)-(4) ne international application to the than the US and provided to | the USPTO as an\$100 the Office or     | \$ 400.00                              |              |
| All other situations                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                    |                                                                                                                            |                                        | 900.00                                 |              |
| Additional fee                                                                        | listing in complia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | and drawings filed<br>nce with 37 CFR<br>R 1.492(i)).              | d in paper over 100 sheets (ex<br>1.821(c) or (e) or computer posi-<br>s of paper or fraction thereof.                     | kcluding<br>rogram listing in an       |                                        |              |
| Total Sheets                                                                          | Extra Sheets  Number of each additional 50 or fraction thereof (round up to a whole number)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                    |                                                                                                                            | RATE                                   |                                        |              |
| 28 - 100 =                                                                            | <sub>0</sub> /50 =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                    |                                                                                                                            | x \$250                                | \$ - 0 -                               |              |
| Sumbarno of \$13                                                                      | 0.00 for furnishing<br>commencement of                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | g any of the search<br>the national stag                           | th fee, examination fee, or the je (37 CFR 1.492(h)).                                                                      | oath or declaration                    | \$                                     |              |
| CLAIMS                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ER FILED                                                           | NUMBER EXTRA                                                                                                               | RATE                                   | \$                                     |              |
| Total claims                                                                          | 24                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | - 20 =                                                             | : 4                                                                                                                        | x \$ 50                                | \$ 200.00                              |              |
| Independent clair                                                                     | ms 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3=                                                                 | . 5                                                                                                                        | x \$200                                | \$1000.00                              |              |
|                                                                                       | ENDENT CLAIM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | S) (if applicable)                                                 |                                                                                                                            | + \$360                                | \$                                     |              |
| TOTAL OF ABOVE CALCULATIONS =                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                    |                                                                                                                            |                                        | \$1200.00                              |              |
| Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                    |                                                                                                                            |                                        |                                        |              |
|                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                    |                                                                                                                            | SUBTOTAL                               | 2 2 0 0 0 0                            |              |
| Processing fee of                                                                     | of \$130.00 for furn<br>date (37 CFR 1.49                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | \$                                                                 |                                                                                                                            |                                        |                                        |              |
|                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | = \$2100.00                                                        |                                                                                                                            |                                        |                                        |              |
| Fee for recording                                                                     | g the enclosed as<br>te cover sheet (37                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | signment (37 CFF<br>CFR 3.28, 3.31).                               | R 1.21(h)). The assignment m<br>\$40.00 per property                                                                       | ust be accompanied<br>2 +              | \$ 80.00                               | · .          |
| Dy all appropriat                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | = \$2180.00                                                        |                                                                                                                            |                                        |                                        |              |
|                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                    | <u> </u>                                                                                                                   |                                        | Amount to be refunded:                 | \$           |
|                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <del></del>                                                        |                                                                                                                            | ······································ | Amount to be charged                   | \$2180.00    |

10/586696

EXPRESS MAIL: EV 913276600 HS DOCKET No: PU0.40042

APRIL PO 20 JUL 2005 ON 2013 ON

Approved for use through 3/31/2007, OMB 0651-0021

Customer No: 24498 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| а. 🗌                                                                                                                                                                                                           | A check in the amount of \$ to cover the above fe                                                                                                                                                                         |                                |  |  |  |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--|--|--|--|--|
| b. X                                                                                                                                                                                                           | Please charge my Deposit Account No. $07-083$ in the amount of \$ $2180.0$ to cover the above fees. A duplicate copy of this sheet is enclosed.                                                                           |                                |  |  |  |  |  |
| c. 🔀                                                                                                                                                                                                           | The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. $0.7 - 0.832$ A duplicate copy of this sheet is enclosed.                     |                                |  |  |  |  |  |
| d. 🗀                                                                                                                                                                                                           | Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. |                                |  |  |  |  |  |
| NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status. |                                                                                                                                                                                                                           |                                |  |  |  |  |  |
|                                                                                                                                                                                                                | D                                                                                                                                                                                                                         | ate: /2/1 20, 2016             |  |  |  |  |  |
| SEND A                                                                                                                                                                                                         | ALL CORRESPONDENCE TO:                                                                                                                                                                                                    | Por a som                      |  |  |  |  |  |
| Tho                                                                                                                                                                                                            | Joseph J. Laks<br>mson Licensing Inc.                                                                                                                                                                                     | SIGNATURE<br>Joseph J. Opalach |  |  |  |  |  |
| P.O                                                                                                                                                                                                            | ent Operations<br>D. Box 5312                                                                                                                                                                                             | NAME<br>Reg. No. 36,229        |  |  |  |  |  |
| Pri                                                                                                                                                                                                            | nceton, NJ 08543-5312                                                                                                                                                                                                     | REGISTRATION NUMBER            |  |  |  |  |  |
|                                                                                                                                                                                                                |                                                                                                                                                                                                                           |                                |  |  |  |  |  |
|                                                                                                                                                                                                                |                                                                                                                                                                                                                           |                                |  |  |  |  |  |
|                                                                                                                                                                                                                |                                                                                                                                                                                                                           |                                |  |  |  |  |  |
|                                                                                                                                                                                                                |                                                                                                                                                                                                                           |                                |  |  |  |  |  |
|                                                                                                                                                                                                                |                                                                                                                                                                                                                           |                                |  |  |  |  |  |